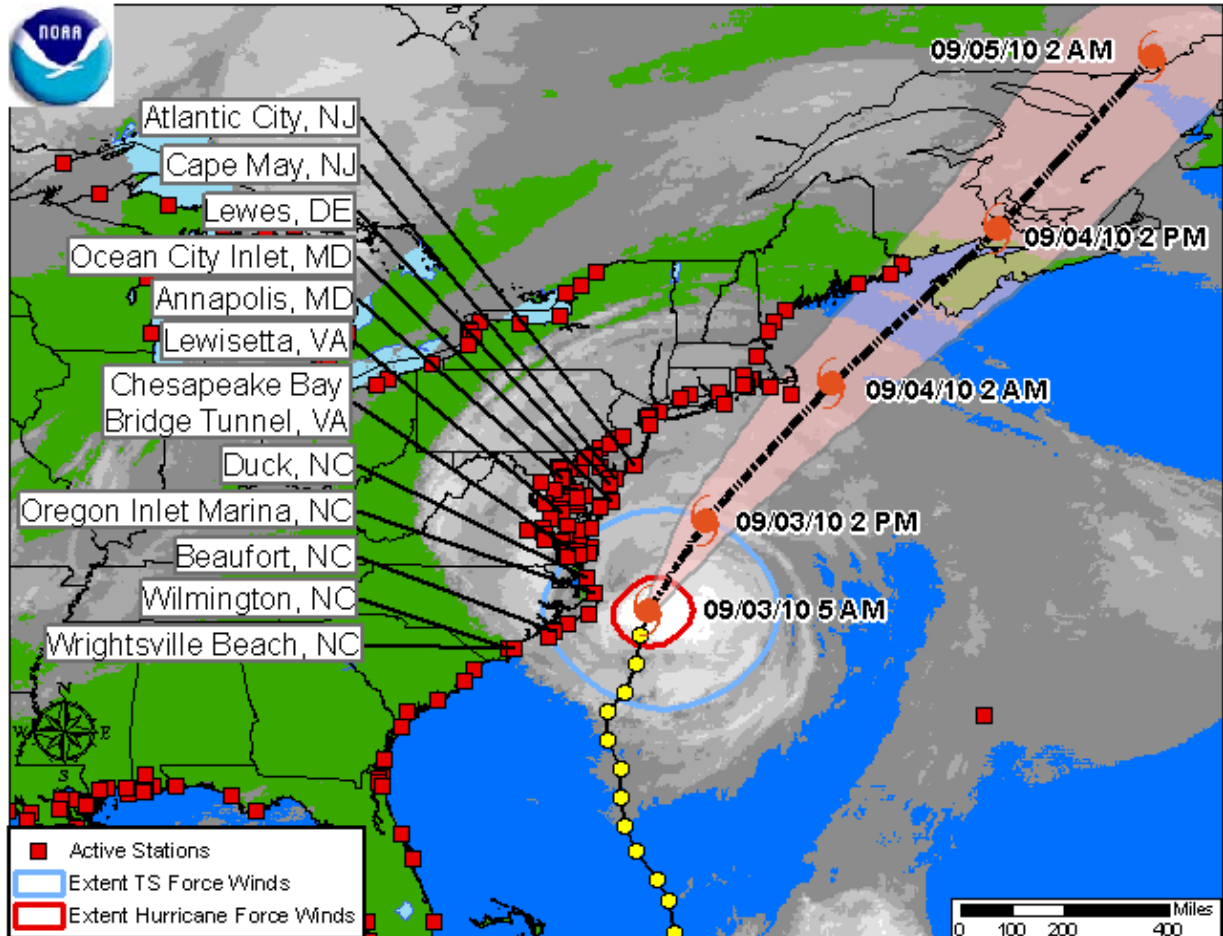




Hurricane EARL QuickLook
Posted: 06:00 EDT 09/03/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/03/2010 06:00 EDT, water levels along the eastern U.S. coastline from North Carolina to New Jersey are 0.2 to 1.2 feet above predicted levels with the exception of Duck, NC where the water levels are 2.3 ft above predicted and Oregon Inlet Marina, NC where the water levels are 0.8 ft below predicted. Winds range from 11 to 31 knots along the coast. Wind gusts of 61 knots observed at Duck, NC and 56 Knots observed at Oregon Inlet Marina, NC. Barometric pressure is falling along the coast.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

WILMINGTON, NC Next predicted high tides are 4.59 ft (1.40 m) at 09/03/2010 17:31 EDT and 4.07 ft (1.24 m) at 09/04/2010 06:03 EDT.

WRIGHTSVILLE BEACH, NC Next predicted high tides are 4.49 ft (1.37 m) at 09/03/2010 15:17 EDT and 3.62 ft (1.10 m) at 09/04/2010 03:45 EDT.

BEAUFORT, NC Next predicted high tides are 3.58 ft (1.09 m) at 09/03/2010 15:57 EDT and 2.92 ft (0.89 m) at 09/04/2010 04:15 EDT.

OREGON INLET MARINA, NC Next predicted high tides are 1.35 ft (0.41 m) at 09/03/2010 15:59 EDT and 1.13 ft (0.34 m) at 09/04/2010 04:24 EDT.

DUCK, NC Next predicted high tides are 3.82 ft (1.16 m) at 09/03/2010 15:22 EDT and 3.03 ft (0.92 m) at 09/04/2010 03:51 EDT.

CHESAPEAKE BAY BRIDGE TUNNEL, VA Next predicted high tides are 2.98 ft (0.91 m) at 09/03/2010 16:11 EDT and 2.45 ft (0.75 m) at 09/04/2010 04:39 EDT.

LEWISSETTA, VA Next predicted high tides are 1.44 ft (0.44 m) at 09/03/2010 08:54 EDT and 1.65 ft (0.50 m) at 09/03/2010 21:51 EDT.

ANNAPOLIS, MD Next predicted high tides are 1.15 ft (0.35 m) at 09/03/2010 12:16 EDT and 1.73 ft (0.53 m) at 09/04/2010 02:10 EDT.

OCEAN CITY INLET, MD Next predicted high tides are 2.41 ft (0.73 m) at 09/03/2010 16:24 EDT and 1.93 ft (0.59 m) at 09/04/2010 04:25 EDT.

LEWES, DE Next predicted high tides are 4.74 ft (1.44 m) at 09/03/2010 16:42 EDT and 3.65 ft (1.11 m) at 09/04/2010 05:11 EDT.

CAPE MAY, NJ Next predicted high tides are 5.46 ft (1.66 m) at 09/03/2010 16:33 EDT and 4.33 ft (1.32 m) at 09/04/2010 05:06 EDT.

ATLANTIC CITY, NJ Next predicted high tides are 4.63 ft (1.41 m) at 09/03/2010 15:25 EDT and 3.56 ft (1.09 m) at 09/04/2010 04:04 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst: MPM

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 36

500 AM EDT FRI SEP 03 2010

...CENTER OF EARL PASSES EAST OF CAPE HATTERAS...

**AT 500 AM EDT THE CENTER OF HURRICANE EARL WAS LOCATED ABOUT 85 MI E OF
CAPE HATTERAS NORTH CAROLINA, ABOUT 465 MI SSW OF NANTUCKET
MASSACHUSETTS NEAR LATITUDE 35.3 NORTH...LONGITUDE 74.0 WEST.**

WATCHES AND WARNINGS

A HURRICANE WARNING IS IN EFFECT FOR...

- * CAPE LOOKOUT NORTH CAROLINA NORTHEASTWARD TO THE NORTH
CAROLINA/VIRGINIA BORDER INCLUDING THE PAMLICO AND THE EASTERN ALBEMARLE
SOUNDS**
- * WESTPORT MASSACHUSETTS EASTWARD AROUND CAPE COD TO HULL
MASSACHUSETTS INCLUDING MARTHAS VINEYARD AND NANTUCKET ISLAND**

A HURRICANE WATCH IS IN EFFECT FOR...

- * NOVA SCOTIA FROM MEDWAY HARBOUR TO DIGBY**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO SANDY HOOK NEW
JERSEY...INCLUDING DELAWARE BAY SOUTH OF SLAUGHTER BEACH AND THE
CHESAPEAKE BAY SOUTH OF NEW POINT COMFORT**
- * THE COAST OF LONG ISLAND NEW YORK FROM FIRE ISLAND INLET EASTWARD ON THE
SOUTH SHORE AND PORT JEFFERSON HARBOR EASTWARD ON THE NORTH SHORE**
- * NEW HAVEN CONNECTICUT TO WEST OF WESTPORT MASSACHUSETTS. INCLUDING
BLOCK ISLAND**
- * NORTH OF HULL MASSACHUSETTS TO THE MERRIMACK RIVER**
- * STONINGTON MAINE EASTWARD TO EASTPORT MAINE**
- * THE COAST OF NOVA SCOTIA FROM LISMORE SOUTHWARD AND EASTWARD TO ECUM
SECUM**
- * PRINCE EDWARD ISLAND**

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- * NORTH OF THE MERRIMACK RIVER TO WEST OF STONINGTON MAINE**
- * THE COAST OF LONG ISLAND WEST OF FIRE ISLAND INLET ON THE SOUTH SHORE AND
WEST OF PORT JEFFERSON HARBOR ON THE NORTH SHORE**
- * NEW BRUNSWICK FROM THE U.S./CANADA BORDER EASTWARD TO FORT LAWRENCE
AND FROM TIDNISH WESTWARD TO SHEDIAC**
- * NOVA SCOTIA FROM ECUM SECUM NORTHEASTWARD TO POINT TUPPER...AND EAST
OF LISMORE TO POINT TUPPER**
- * CAPE BRETON ISLAND AND THE MAGDALEN ISLANDS**

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 AM EDT THE CENTER OF HURRICANE EARL WAS LOCATED ABOUT 85 MI E OF CAPE HATTERAS NORTH CAROLINA, ABOUT 465 MI SSW OF NANTUCKET MASSACHUSETTS NEAR LATITUDE 35.3 NORTH...LONGITUDE 74.0 WEST. EARL IS MOVING TOWARD THE NORTH-NORTHEAST NEAR 18 MPH. AN INCREASE IN FORWARD SPEED AND A TURN TOWARD THE NORTHEAST ARE EXPECTED IN THE NEXT 12 TO 24 HOURS. ON THE FORECAST TRACK...THE CENTER OF EARL WILL MOVE AWAY FROM THE NORTH CAROLINA OUTER BANKS TODAY...AND WILL APPROACH SOUTHEASTERN NEW ENGLAND TONIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 105 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY TWO HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. SLOW WEAKENING IS FORECAST DURING THE NEXT 24 TO 36 HOURS...BUT EARL IS EXPECTED REMAIN A LARGE HURRICANE AS IT APPROACHES SOUTHEASTERN NEW ENGLAND.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 70 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 205 MILES. NOAA BUOY 41001 LOCATED SOUTHEAST OF THE CENTER RECENTLY REPORTED SUSTAINED WINDS OF 59 MPH WITH A GUST TO 72 MPH.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 955 MB...28.20 INCHES.

HAZARDS AFFECTING LAND

WINDS...TROPICAL-STORM-FORCE WINDS ARE OCCURRING ALONG THE NORTH CAROLINA COAST WITHIN THE WARNING AREA...AND HURRICANE CONDITIONS ARE POSSIBLE IN THE OUTER BANKS DURING THE NEXT FEW HOURS. TROPICAL-STORM-FORCE WINDS WILL LIKELY REACH THE COAST FROM VIRGINIA NORTHWARD TO MASSACHUSETTS LATER TODAY...AND SPREAD OVER THE COAST OF MAINE WITHIN THE WARNING AREA TONIGHT. HURRICANE CONDITIONS ARE EXPECTED WITHIN THE HURRICANE WARNING AREA IN MASSACHUSETTS TONIGHT AND SATURDAY MORNING.

STORM SURGE...A DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA OVER NORTH CAROLINA...AS WELL AS IN THE LOWER CHESAPEAKE BAY. STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA OVER MASSACHUSETTS. ELSEWHERE WITHIN THE TROPICAL STORM WARNING AREA...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE GROUND LEVEL. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DESTRUCTIVE WAVES.

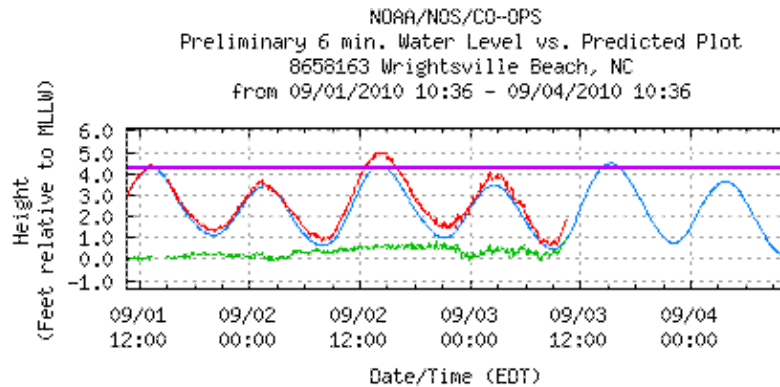
SURF...LARGE SWELLS FROM EARL WILL CONTINUE TO AFFECT THE EAST COAST OF THE UNITED STATES TODAY...AND BEGIN TO SUBSIDE IN THE NORTHERN BAHAMAS. THESE SWELLS WILL LIKELY CAUSE DANGEROUS SURF CONDITIONS AND RIP CURRENTS.

FORECASTER BEVEN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Wrightsville Beach - Air/Water Temp](#), [Wilmington - Water Level](#), [Wilmington - Barometric](#), [Wilmington - Air/Water Temp](#), [Beaufort - Water Level](#), [Beaufort - Winds](#), [Beaufort - Barometric](#), [Beaufort - Air/Water Temp](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [Oregon Inlet Marina - Barometric](#), [Oregon Inlet Marina - Air/Water Temp](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Duck - Air/Water Temp](#), [Chesapeake Bay Bridge Tunnel - Water Level](#), [Chesapeake Bay Bridge Tunnel - Winds](#), [Chesapeake Bay Bridge Tunnel - Barometric](#), [Chesapeake Bay Bridge Tunnel - Air/Water Temp](#), [Lewisetta - Water Level](#), [Lewisetta - Winds](#), [Lewisetta - Barometric](#), [Lewisetta - Air/Water Temp](#), [Annapolis - Water Level](#), [Annapolis - Barometric](#), [Annapolis - Air/Water Temp](#), [Ocean City Inlet - Water Level](#), [Ocean City Inlet - Winds](#), [Ocean City Inlet - Barometric](#), [Ocean City Inlet - Air/Water Temp](#), [Lewes - Water Level](#), [Lewes - Winds](#), [Lewes - Barometric](#), [Lewes - Air/Water Temp](#), [Cape May - Water Level](#), [Cape May - Winds](#), [Cape May - Barometric](#), [Cape May - Air/Water Temp](#), [Atlantic City - Water Level](#), [Atlantic City - Barometric](#), [Atlantic City - Air/Water Temp](#).

Wrightsville Beach, NC - [Return to List](#)

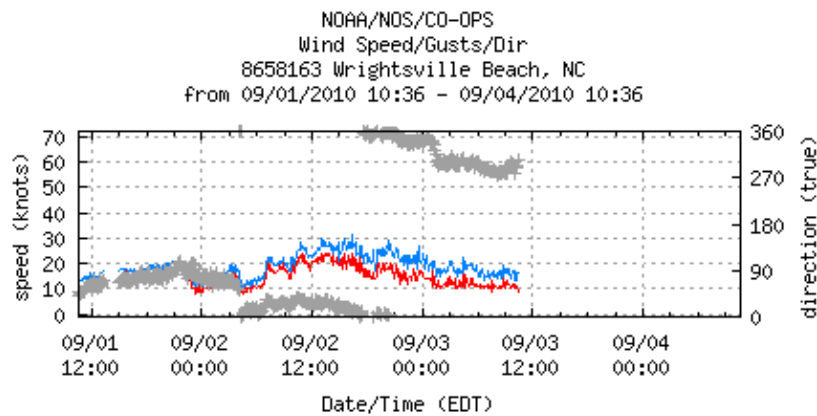


Last Observed Sample: 09/03/2010 10:24 (EDT)

Relative to **MLLW**: **Observed: 1.84 ft.** **Predicted: 0.91 ft.** **Residual: 0.93 ft.**

Historical Maximum Water Level: Sep 25 2008, 2.78 ft. above **MHHW**

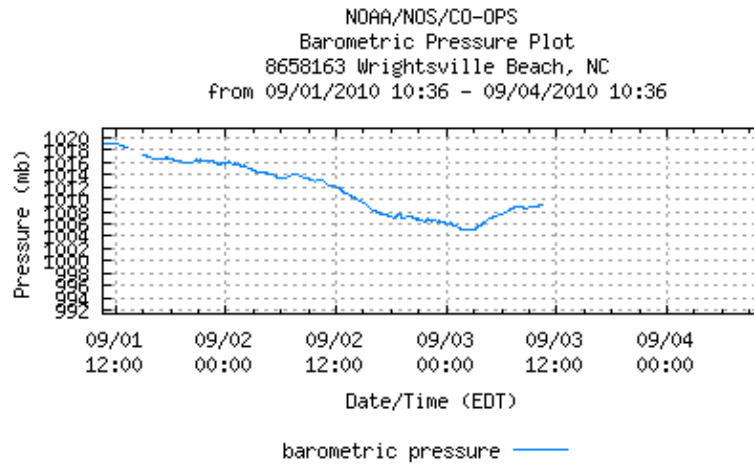
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Wind Speed: 9 knots **Gusts: 16 knots** **Direction: 303° T**

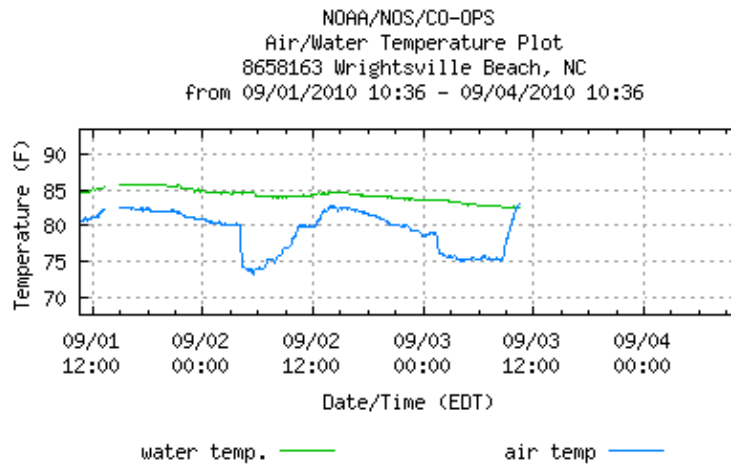
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Barometric Pressure: 1009.0 mb

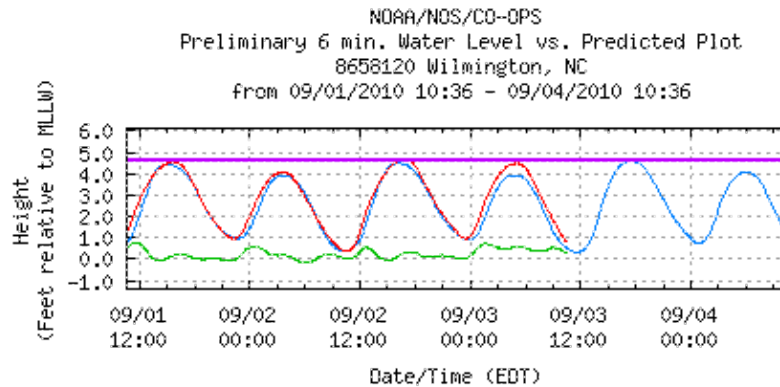
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Water Temperature: 82.6° F Air Temperature: 83.1° F

Wilmington, NC - [Return to List](#)



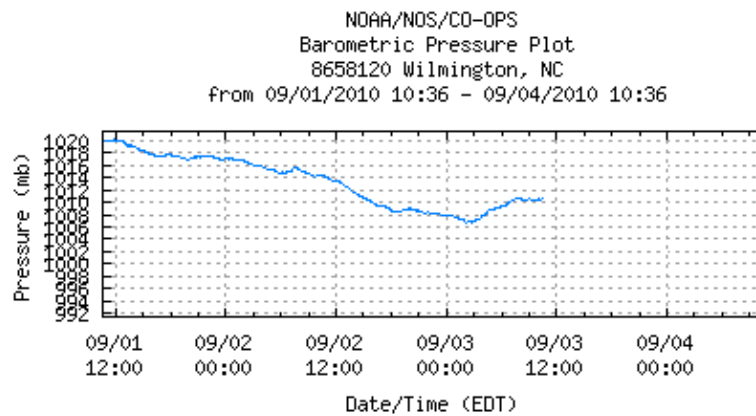
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 09/03/2010 10:24 (EDT)

Relative to **MLLW**: **Observed: 0.81 ft. Predicted: 0.53 ft. Residual: 0.28 ft.**

Historical Maximum Water Level: Oct 15 1954, 3.47 ft. above **MHHW**

Wilmington, NC - [Return to List](#)

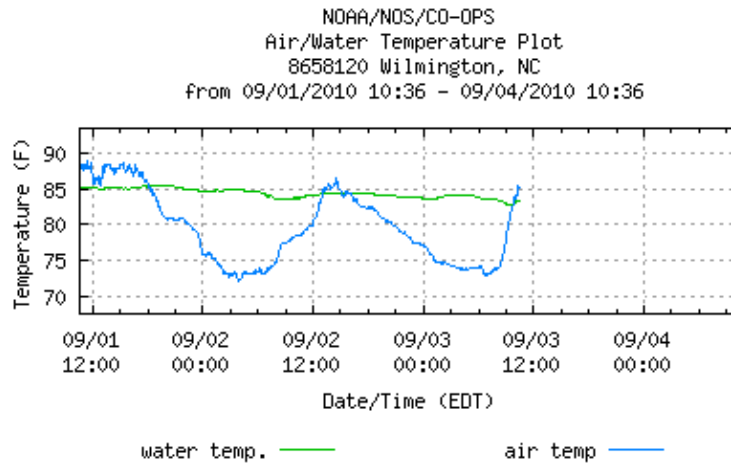


barometric pressure —

Last Observed Sample: 09/03/2010 10:24 (EDT)

Barometric Pressure: 1010.5 mb

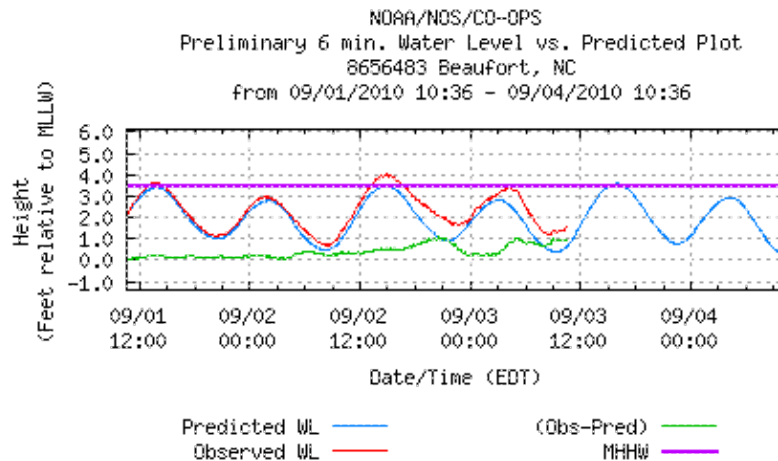
Wilmington, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Water Temperature: 83.3° F Air Temperature: 85.3° F

Beaufort, NC - [Return to List](#)

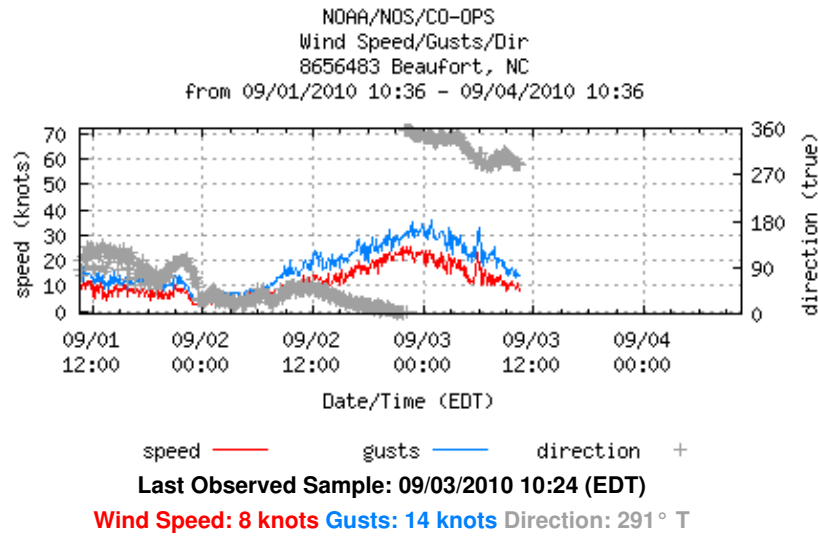


Last Observed Sample: 09/03/2010 10:24 (EDT)

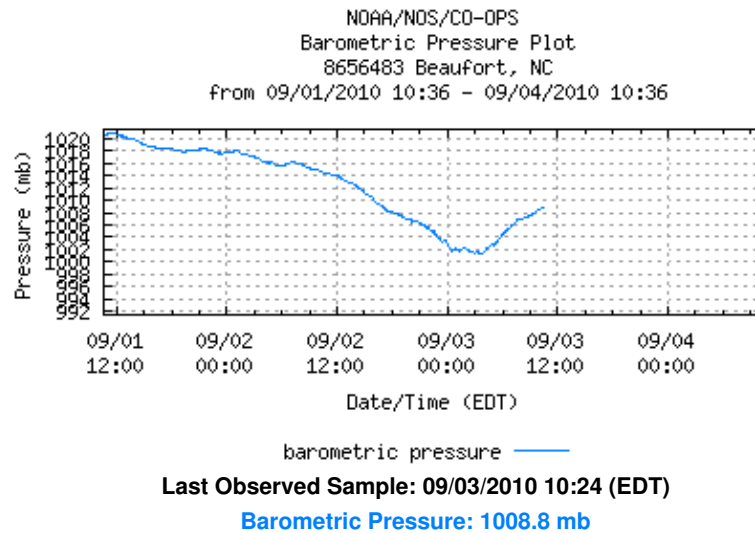
Relative to **MLLW**: Observed: 1.52 ft. Predicted: 0.60 ft. Residual: 0.92 ft.

Historical Maximum Water Level: Sep 16 1999, 2.74 ft. above **MHHW**

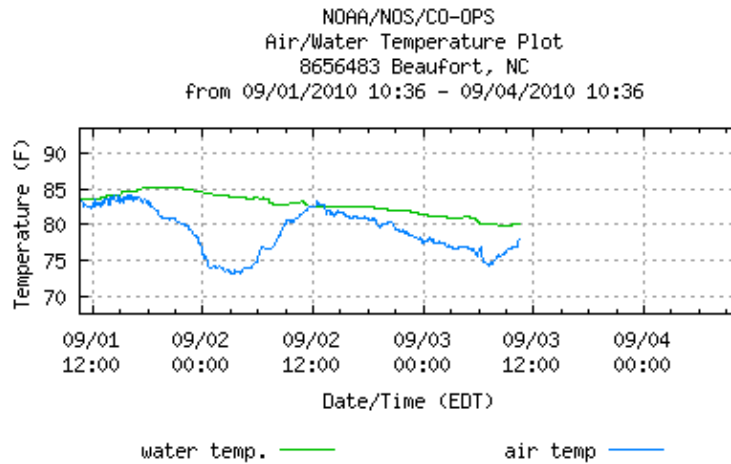
Beaufort, NC - [Return to List](#)



Beaufort, NC - [Return to List](#)



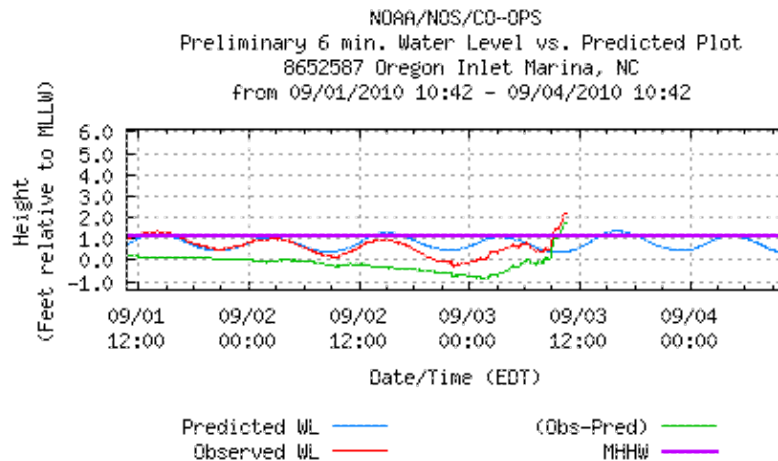
Beaufort, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Water Temperature: 80.1° F Air Temperature: 77.9° F

Oregon Inlet Marina, NC - [Return to List](#)

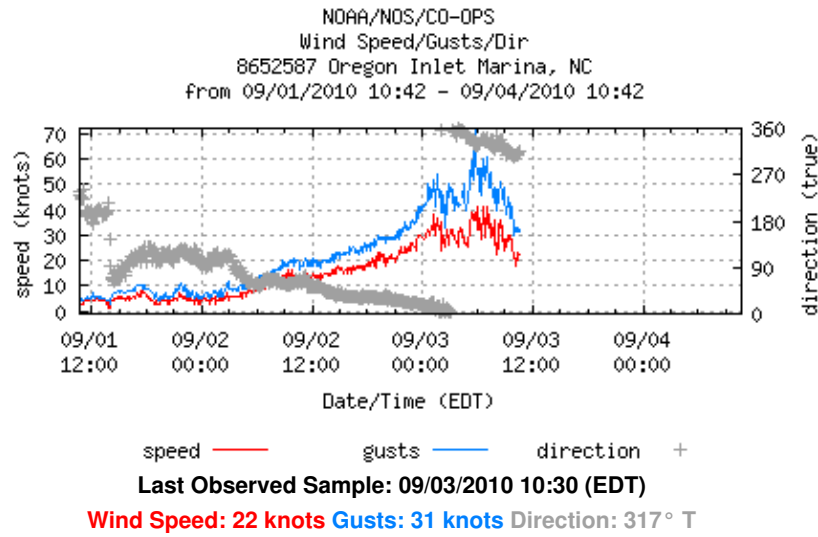


Last Observed Sample: 09/03/2010 10:30 (EDT)

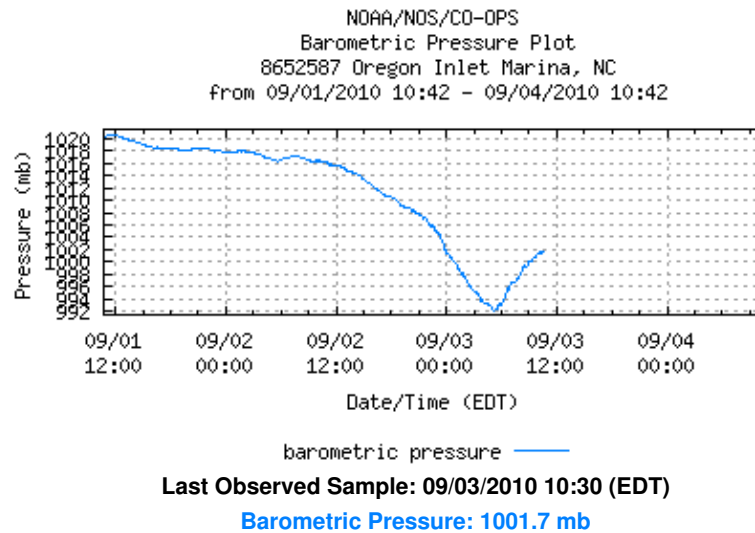
Relative to **MLLW**: Observed: 2.18 ft. Predicted: 0.40 ft. Residual: 1.78 ft.

Historical Maximum Water Level: Sep 16 1999, 4.49 ft. above **MHHW**

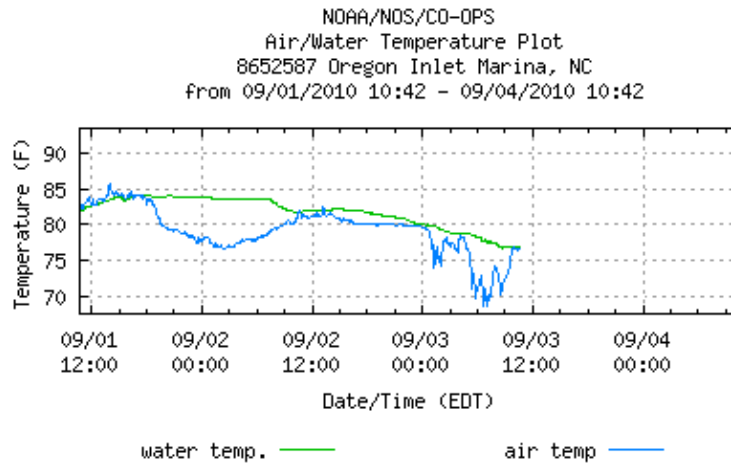
Oregon Inlet Marina, NC - [Return to List](#)



Oregon Inlet Marina, NC - [Return to List](#)



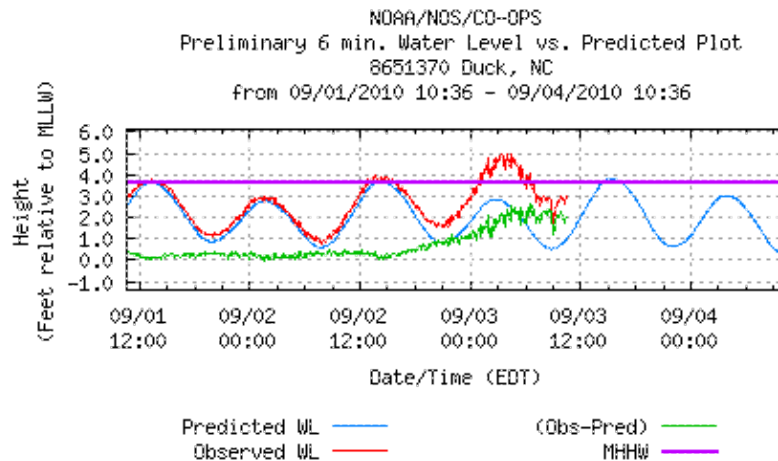
Oregon Inlet Marina, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Water Temperature: 76.8° F Air Temperature: 76.5° F

Duck, NC - [Return to List](#)

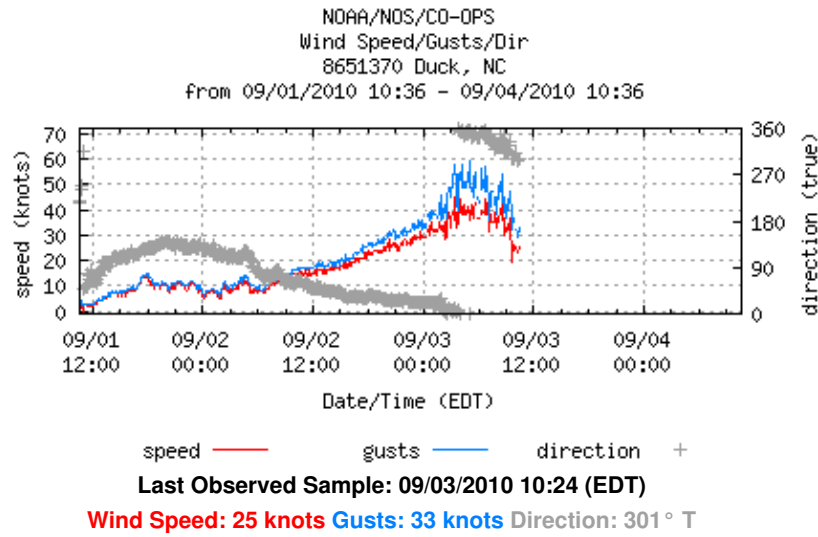


Last Observed Sample: 09/03/2010 10:24 (EDT)

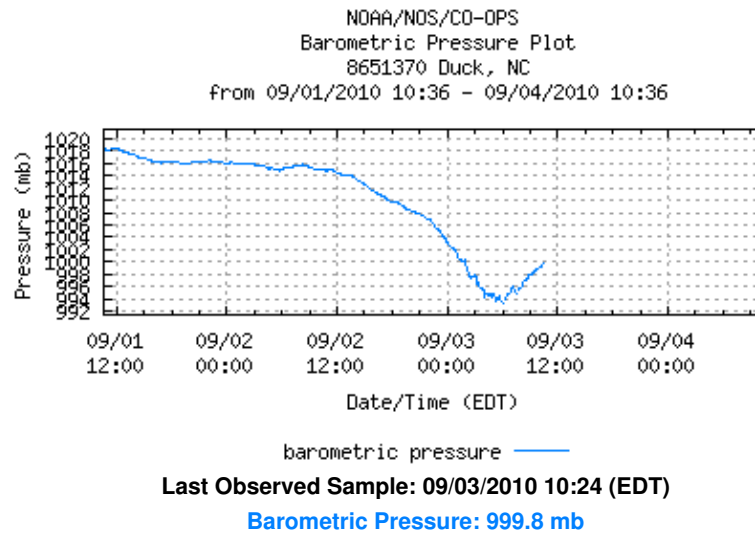
Relative to **MLLW**: Observed: 2.96 ft. Predicted: 0.96 ft. Residual: 2.00 ft.

Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above **MHHW**

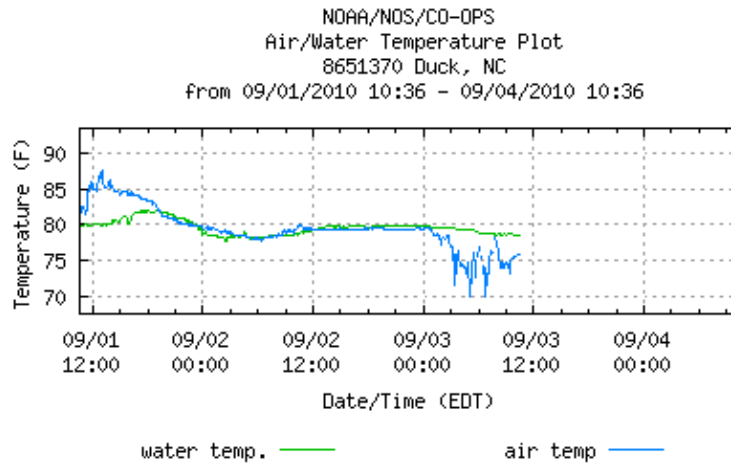
Duck, NC - [Return to List](#)



Duck, NC - [Return to List](#)



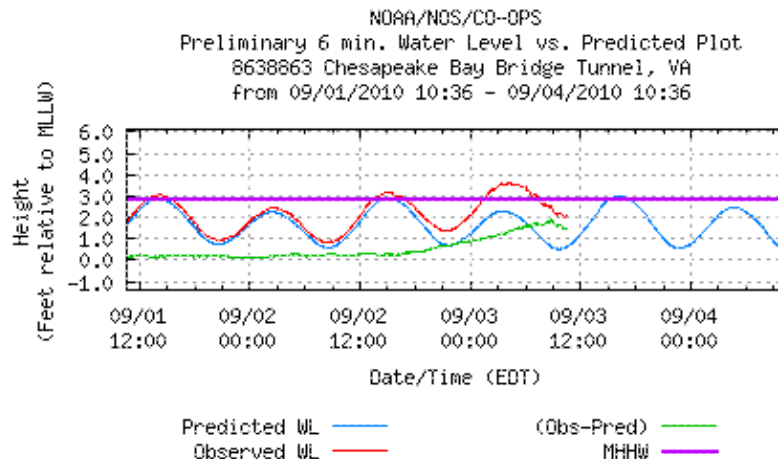
Duck, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Water Temperature: 78.6° F Air Temperature: 75.7° F

Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)

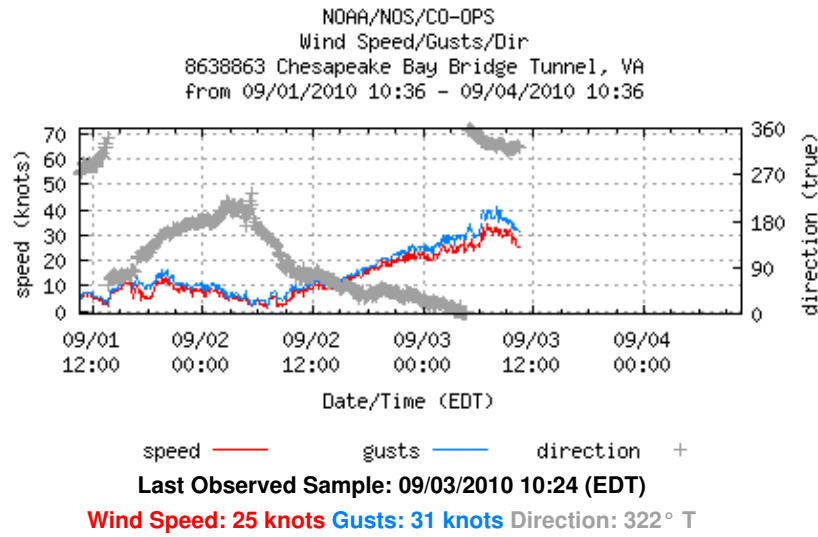


Last Observed Sample: 09/03/2010 10:24 (EDT)

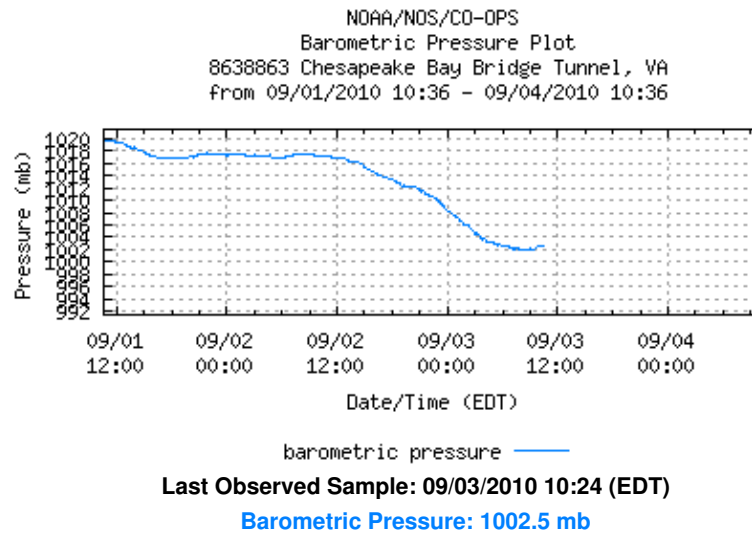
Relative to **MLLW**: Observed: 2.09 ft. Predicted: 0.60 ft. Residual: 1.49 ft.

Historical Maximum Water Level: Feb 5 1998, 3.68 ft. above **MHHW**

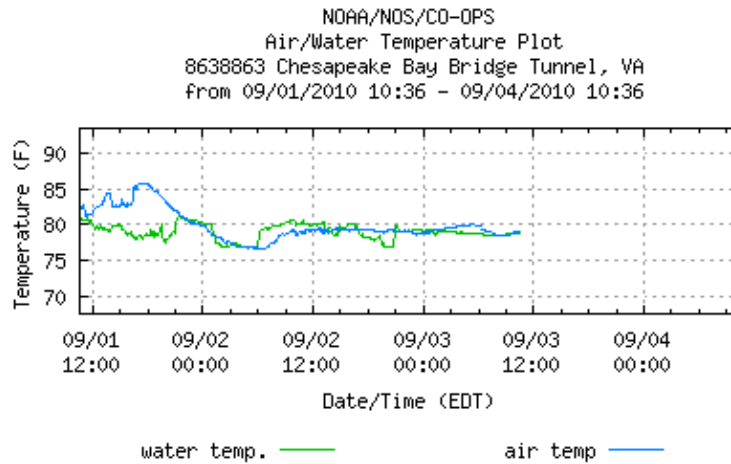
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



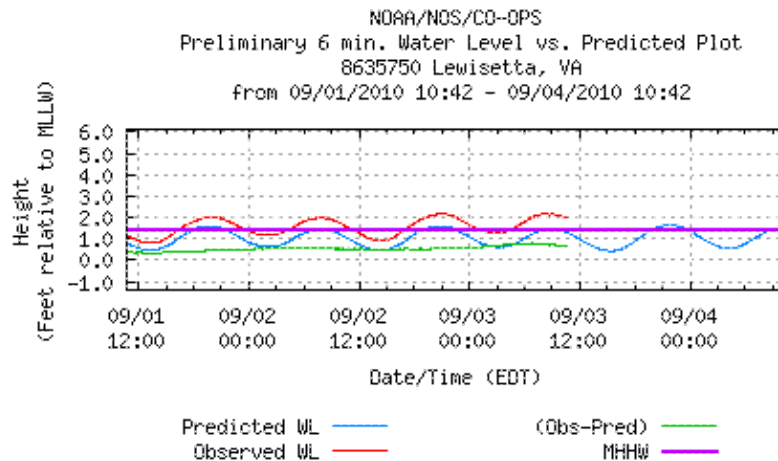
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Water Temperature: 78.8° F Air Temperature: 79.0° F

Lewisetta, VA - [Return to List](#)

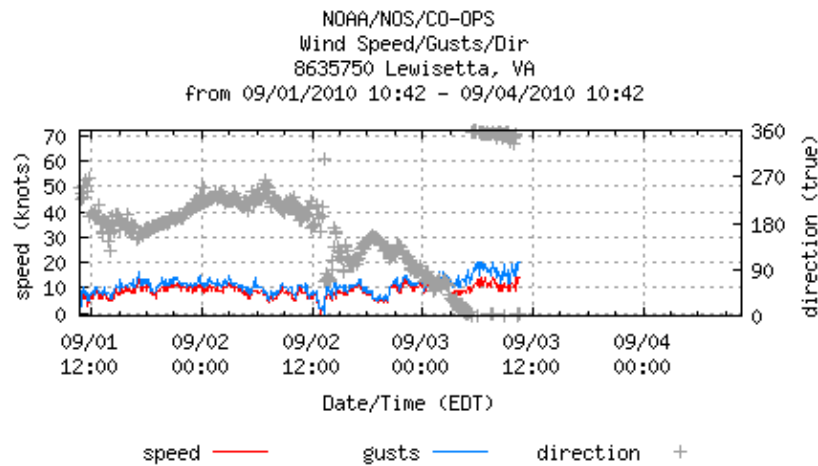


Last Observed Sample: 09/03/2010 10:30 (EDT)

Relative to **MLLW**: Observed: 1.98 ft. Predicted: 1.31 ft. Residual: 0.67 ft.

Historical Maximum Water Level: Feb 5 1998, 2.33 ft. above **MHHW**

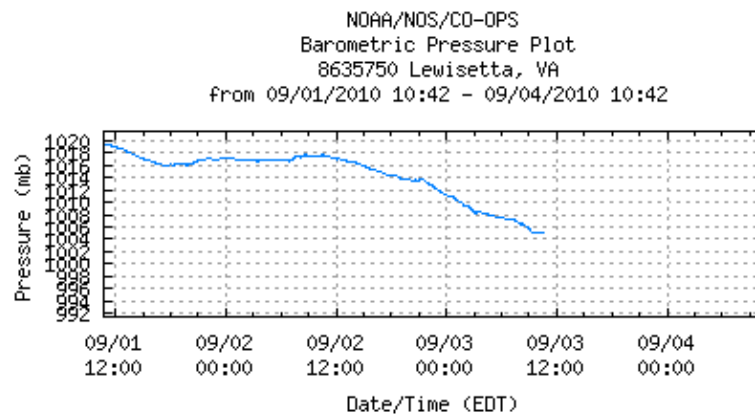
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Wind Speed: 14 knots Gusts: 20 knots Direction: 004° T

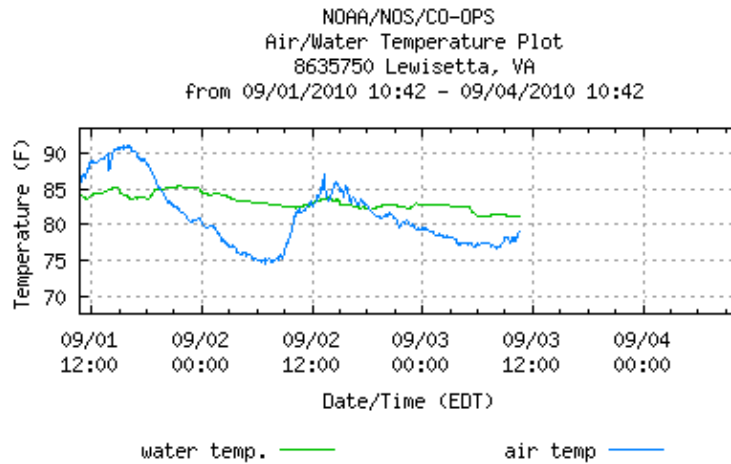
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Barometric Pressure: 1005.0 mb

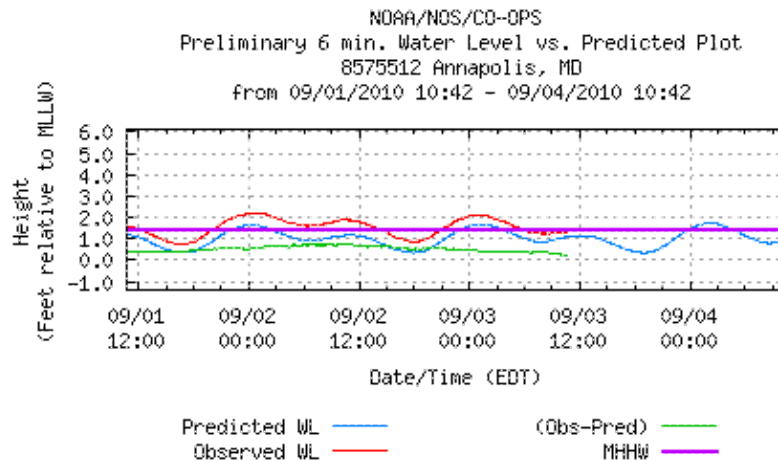
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Water Temperature: 81.2° F Air Temperature: 78.9° F

Annapolis, MD - [Return to List](#)

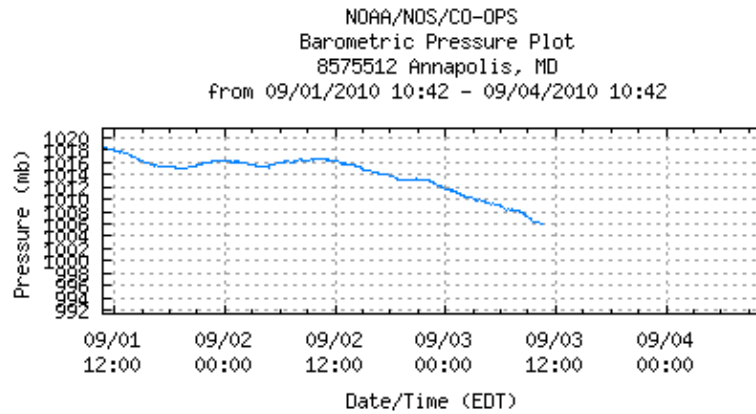


Last Observed Sample: 09/03/2010 10:30 (EDT)

Relative to **MLLW**: **Observed: 1.28 ft. Predicted: 1.07 ft. Residual: 0.21 ft.**

Historical Maximum Water Level: Aug 23 1933, 4.74 ft. above **MHHW**

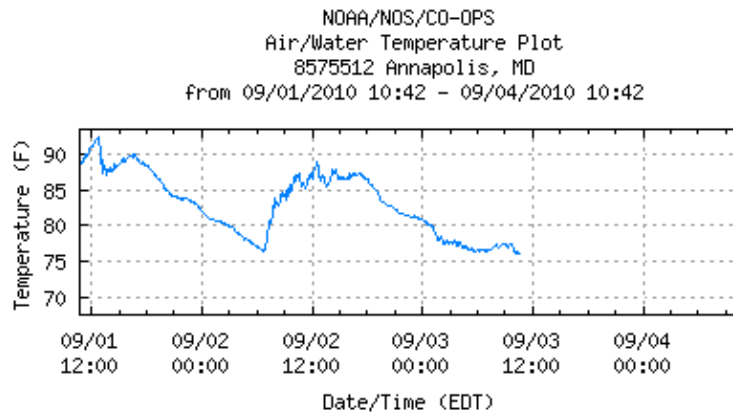
Annapolis, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Barometric Pressure: 1005.9 mb

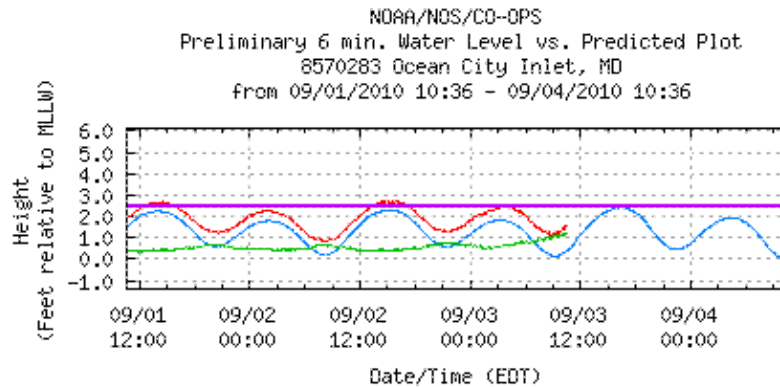
Annapolis, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Water Temperature: n/a Air Temperature: 76.2° F

Ocean City Inlet, MD - [Return to List](#)

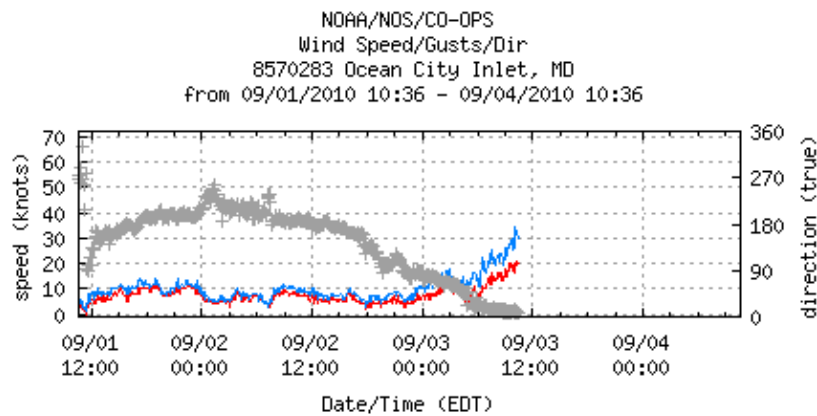


Last Observed Sample: 09/03/2010 10:24 (EDT)

Relative to **MLLW**: **Observed: 1.57 ft. Predicted: 0.36 ft. Residual: 1.21 ft.**

Historical Maximum Water Level: Feb 5 1998, 3.6 ft. above **MHHW**

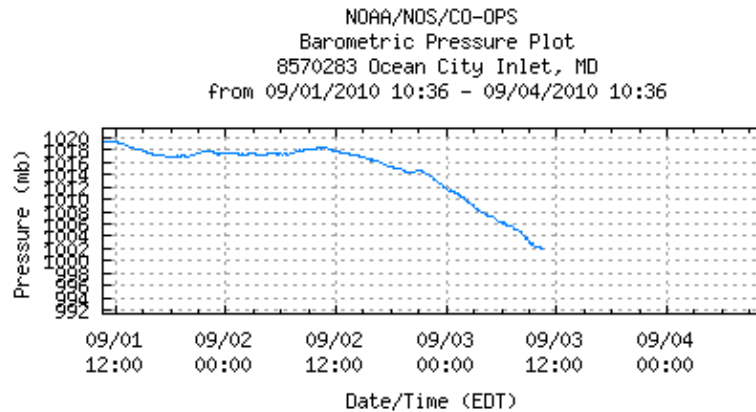
Ocean City Inlet, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Wind Speed: 20 knots Gusts: 30 knots Direction: 009° T

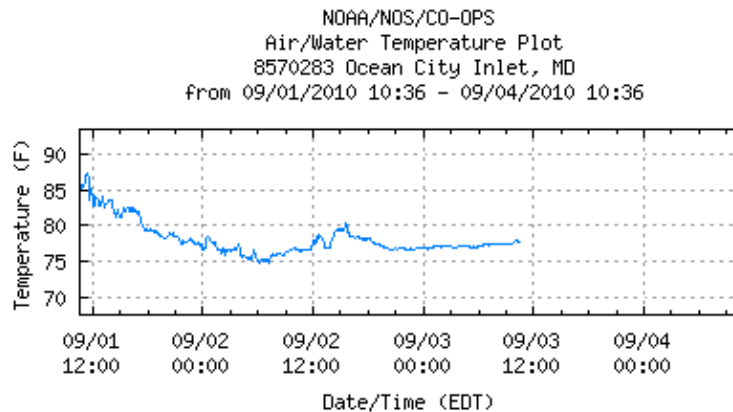
Ocean City Inlet, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Barometric Pressure: 1001.8 mb

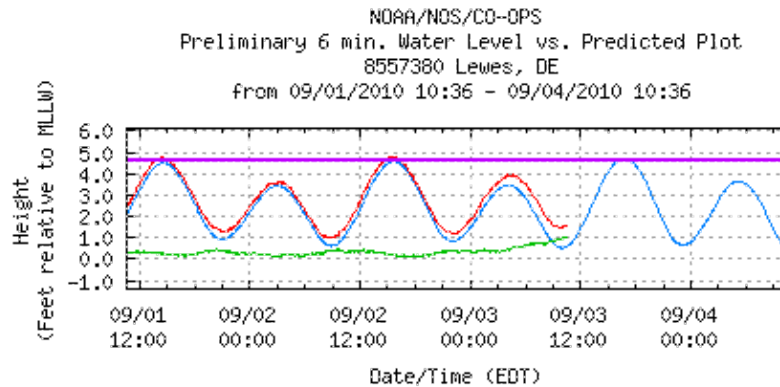
Ocean City Inlet, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Water Temperature: n/a Air Temperature: 77.7° F

Lewes, DE - [Return to List](#)



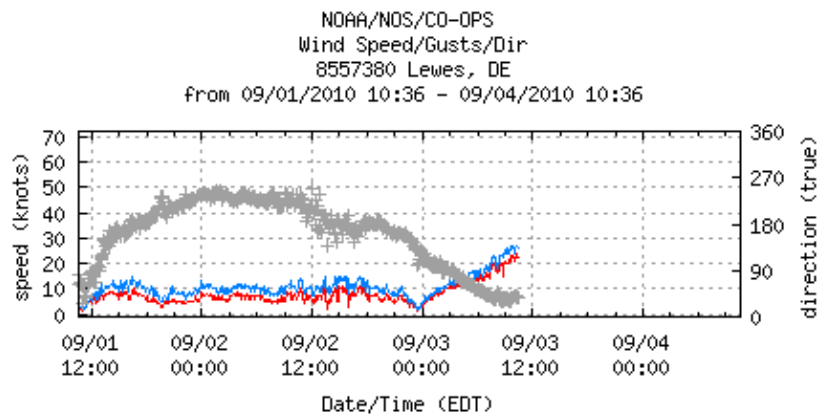
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 09/03/2010 10:24 (EDT)

Relative to **MLLW**: **Observed: 1.60 ft. Predicted: 0.57 ft. Residual: 1.03 ft.**

Historical Maximum Water Level: Mar 6 1962, 4.57 ft. above **MHHW**

Lewes, DE - [Return to List](#)

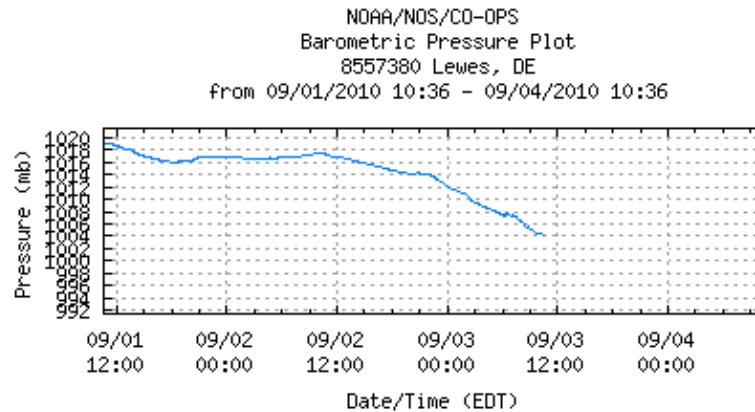


speed — gusts — direction +

Last Observed Sample: 09/03/2010 10:24 (EDT)

Wind Speed: 22 knots Gusts: 26 knots Direction: 038° T

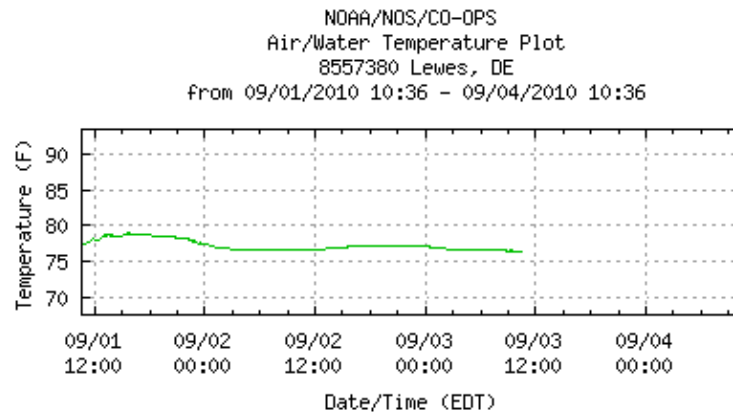
Lewes, DE - [Return to List](#)



Last Observed Sample: 09/03/2010 10:24 (EDT)

Barometric Pressure: 1004.1 mb

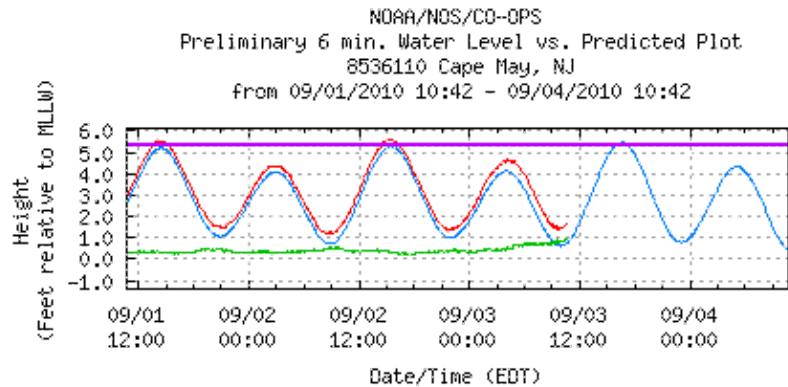
Lewes, DE - [Return to List](#)



Last Observed Sample: 09/01/2010 10:36 (EDT)

Water Temperature: 77.5° F Air Temperature: n/a

Cape May, NJ - [Return to List](#)

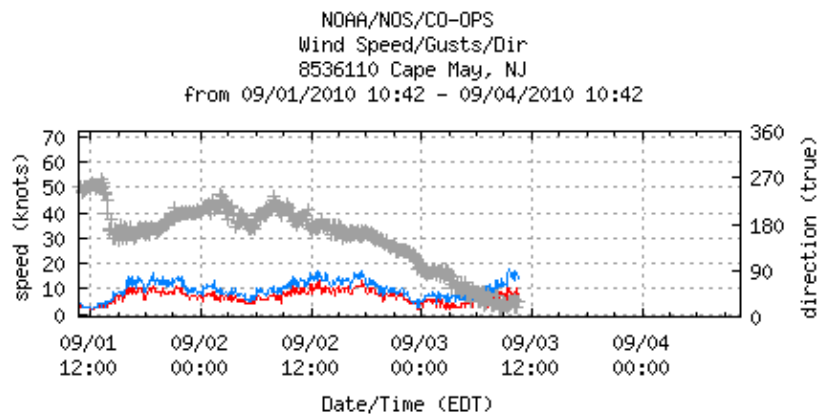


Last Observed Sample: 09/03/2010 10:30 (EDT)

Relative to **MLLW**: **Observed: 1.62 ft.** **Predicted: 0.72 ft.** **Residual: 0.90 ft.**

Historical Maximum Water Level: Sep 27 1985, 3.36 ft. above **MHHW**

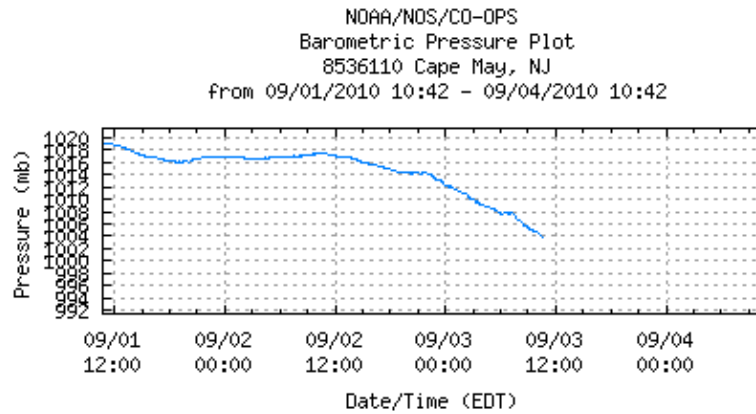
Cape May, NJ - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Wind Speed: 8 knots **Gusts: 14 knots** **Direction: 028° T**

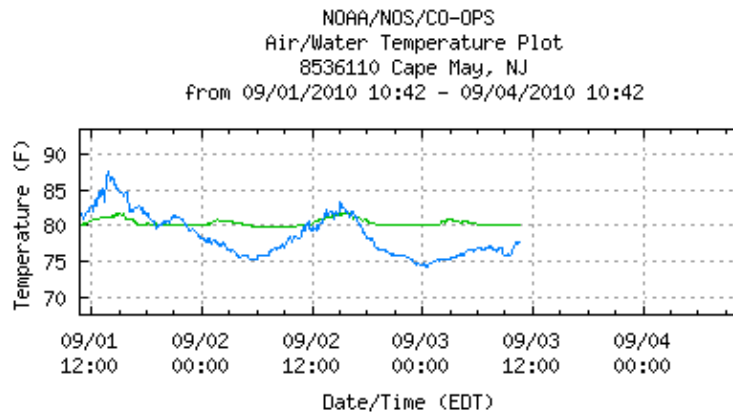
Cape May, NJ - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Barometric Pressure: 1003.9 mb

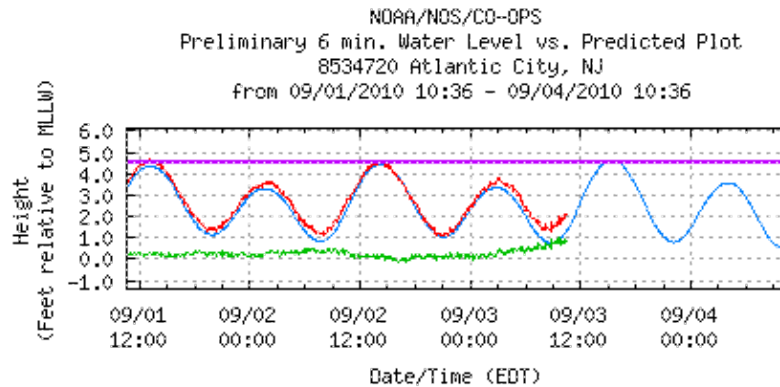
Cape May, NJ - [Return to List](#)



Last Observed Sample: 09/03/2010 10:30 (EDT)

Water Temperature: 80.1° F Air Temperature: 77.7° F

Atlantic City, NJ - [Return to List](#)

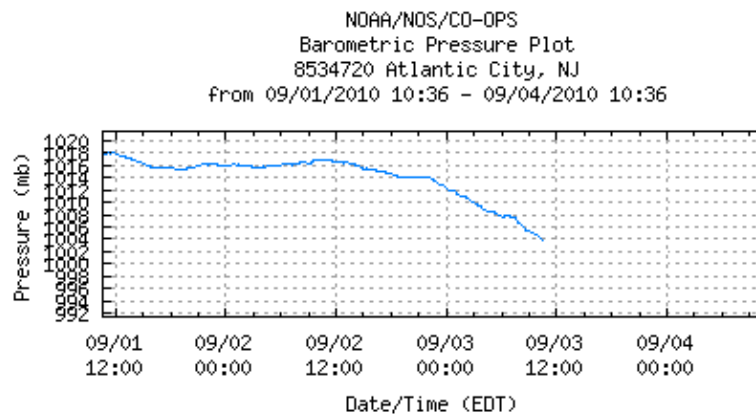


Last Observed Sample: 09/03/2010 10:24 (EDT)

Relative to **MLLW**: **Observed: 2.08 ft. Predicted: 1.28 ft. Residual: 0.80 ft.**

Historical Maximum Water Level: Dec 11 1992, 4.38 ft. above **MHHW**

Atlantic City, NJ - [Return to List](#)

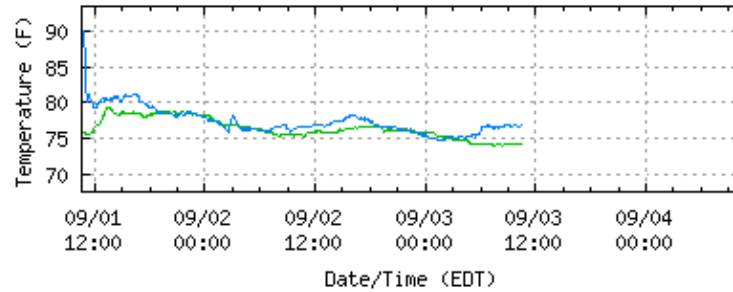


Last Observed Sample: 09/03/2010 10:24 (EDT)

Barometric Pressure: 1003.9 mb

Atlantic City, NJ - [Return to List](#)

NOAA/NOS/CO-OPS
Air/Water Temperature Plot
8534720 Atlantic City, NJ
from 09/01/2010 10:36 - 09/04/2010 10:36



water temp. — air temp —

Last Observed Sample: 09/03/2010 10:24 (EDT)

Water Temperature: 74.3° F Air Temperature: 76.8° F

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce